Kohsaar Academy

Maths Lesson Plans
Level 5
Term 2

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Level 5 Term 2 Week 1 Day 1	**Lesson Plan**

Objective: Students will be able to divide the bigger number given on page 25

Activity: Explanation + written work

Material: Notebooks/pencils.

Procedure:

Warm up Q/A:

- How many 9 make 81? = 9 (81÷9)
- How many 7 make 21? = 3 (21÷7)
- How many 4, 20 have? = 5 (20÷4) so on

Explain: To explain the division of long numbers explains the following.
Go carefully step by step for example 826,934÷56

Give one more example

Class work: Exercise A page 24

Wrap up: homework exercise B page 24

Level 5 Term 2 Week 1 Day 2	**Lesson Plan**

Objective: To teach students division of bigger numbers with 3 digit divisors.

Activity: Explanation + written work

Material: Notebooks / pencils.

Procedure: Same procedure as used on day 1, week 1.

Class work: Exercise D page 24

Wrap up: Homework, exercise C page 24.

Level 5
Term 2
Week 1
Day 3

Lesson Plan

Objective: Students will be able to divide bigger numbers on page 25

Activity: Explanation + written work

Material: Notebooks / pencils.

Procedure: See the procedure of week 1, day 1, term 1.
See explanation of page 25 for further explanation.

Class work: Exercise A.

Level 5
Term 2
Week 1
Day 4

Lesson Plan

Objective: To make students to practice division questions.

Activity: Written work

Material: Notebooks / pencils.

Procedure:

Warm up: Same procedure used on day 2, 3, week 1 and term 1.

Class work: Exercise B 5 questions page 25

Wrap up: Homework, exercise C page 25.

Level 5
Term 2
Week 1
Day 5

Lesson Plan

Objective: To reinforce the concepts revision of division questions which students feel difficult.

Procedure: Teacher revises the concepts.

Wrap up: homework, Assessment of page 24, 25.

Level 5 Term 2 Week 2 Day 1	**Lesson Plan**

Objective: To assess the student's concept about division.

Activity: Assessment

Material: Notebooks / pencils

Procedure: Class work, Students will give assessment.

Level 5 Term 2 Week 2 Day 2	Lesson Plan

Objective: To teach DMAS rule for simplification of four operations.

Activity: Explanation + solution

Material: Notebooks, Pencils.

Procedure:
Warm up Q/A:

5+6= 11, 7x2= 14, 9÷3= 3, 9-5= 4

See the whole process of explanation questions given on page 28 (book count down)

Class work: Exercise A page 28 exercise B page 29

Wrap up: Homework, Exercise A page 29

Level 5 Term 2 Week 2 Day 3	**Lesson Plan**

Objective: Students will be able to simplify given operations from page 29.

Activity: Written work

Material: Notebooks, pencils.

Procedure: Follow the procedure of day 2, week 2, term 2.

Class work: Exercise C, D page 29 selected questions.

Level 5 Term 2 Week 2 Day 4	Lesson Plan

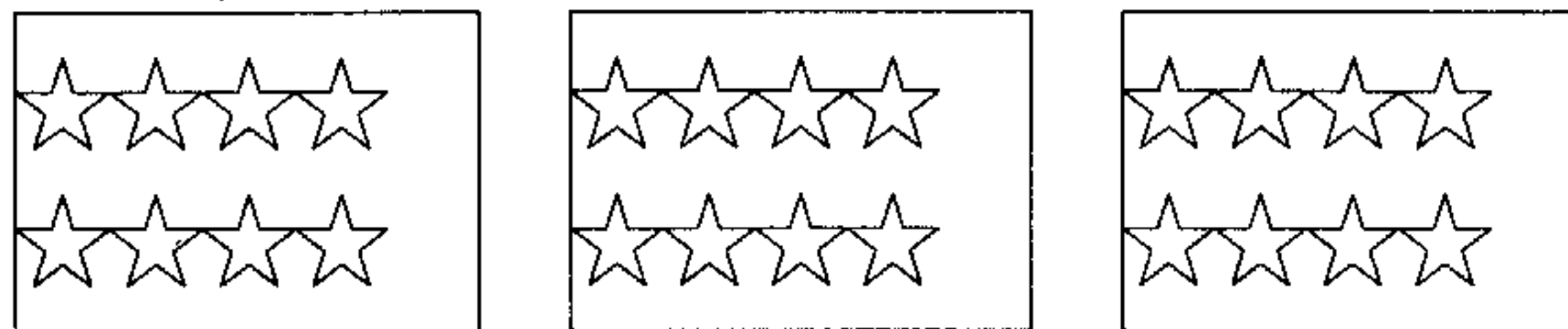
Objective: To teach simplification in brackets.

Activity: Written work

Material: Simple pages, cut outs of ☆ s ,note books , pencils

Procedure:

Warm up Questions: 7x6= 42, 42+5= 47, 90÷2= 45, 94-4= 90,

- Make 4 groups in the class.
- Give 3 half pages and a chart to each group.
- Give some ☆ to them.
- Ask the groups to paste 8 cut outs on each three pages like:-

- Ask them to paste these pages on the charts.
- Ask them to paste 4 ☆ on the charts not on the pages.
- Ask them to count how many ☆ did each group paste? (28 ☆)

Explain: We can do this by another way.

Solution	**Explanation**
4+ (8x3) solve brackets	4+ (8+8+8)
= 4+24 then numbers out of brackets.	= 4+24
= 28	= 28

- Make students to write this solution in the charts.

Class work: Exercise A, page 31

Wrap up: Home, exercise B page 31

Level 5 Term 2 Week 2 Day 5	Lesson Plan

Objective: Simplification brackets in fractions.

Activity: Written work simplifying

Material: Simple pages, glaze paper, charts another chart as shown in activity 2, notebooks, pencils

Procedure:

Warm up: 4+ (5x2) =? (2+22)x4 = ? 2x(8-1) –? 6x(18÷9) =?

Activity 1:

- Make groups in the class.
- Give a page and glaze paper to each group and ask them to
- Draw a ◯ and 2 "11/11" in the circle.
- Paste glaze paper to show (8/11 – 1/11)
- Draw a 3/11 out side the
- Add square inside and outside.

Explain: We can do it through another way

3/11 + (8/11 – 1/11)
= 3/11 + (8-1/11)
= 3/11 + 7/11
=3+7/11
=10/11 answer

Explain: Brackets ( ) help us to solve sums involving two or more operations by telling which part of the sum to do first/

Activity 2: Paste a chart the board to explain that

= (5.0 - 0.5) x 2
= 4.5 x 2
= 9.5

Explain some more examples.

Class work: Exercise C, D page 31

Wrap up: homework, exercise E.

Level 5 Term 2 Week 3 Day 1	**Lesson Plan**

Objective: Revision and preparation for test topic simplification.

Wrap up: homework, Assessment topic simplification.

Level 5 Term 2 Week 3 Day 2	**Lesson Plan**

Assessment: Questions will be decided by teacher.

Level 5 Term 2 Week 3 Day 3	Lesson Plan

Objective: To teach simplification through [{()}]

Activity: Written work

Material: Notebooks, pencils

Procedure:

Warm up Q/A:

2x(4+5) = 1+(2x3) = 5x(6÷2) = 9÷(6-3) = 6x(4-4) =

What will we do when 4+[15-{7+(6÷2)}] type questions come.

- Make groups
- First let students try to solve this question their selves.
- Give them 5 minutes to solve it.

Explanation: Some time we have to solve more complex sums with three or more operations. To help us decide the order in which to do the operations, we use three types of brackets.

- ( ) round brackets
- { } double or flower brackets
- [ ] square brackets.

We simplify the questions in the order.

- First solve the sum in ( )
- Then solve the sum in { }
- And then solve the sum in [ ]
- Like: 4+[15-{7+(6÷2)}]
  = 4[15-{7+3}]
  = 4+ [15-10]
  = 4+5
  = 9 Answer

Explain: Some more examples like this.

Class work: Exercise A page 32

Wrap up: Homework, exercise B page 33

Level 5
Term 2
Week 3
Day 4

Lesson Plan

Objective: To give the concept of simplification of fractions with different denominators.

Activity: Written work

Material: Notebooks, Pencils

Procedure:

- Write some questions from exercise A page 32 and call some students to solve these questions.
- Write the question 5/6 + (1/2 +3/4)
- Call some students to solve this question. They will be unable to solve it.

Activity 1:

- Call two students, give a page to each.

- Ask one student to divide his page into 1/2
- Ask other student to divide his page into 3/4 because 1/2 has big parts while 3/4 has small parts.

- So first we will make the parts equal like we can add them like

5/6 + (1/2 + 3/4)
= 5/6 + (2/4 + 3/4)
= 5/6 + (2+3/4)
= 5/6 + 5/4
= 10/12 + 15/12
= 10+15/12
= 25/12

Explain some more examples

Class work: Exercise B page 32 Question 1, 3, 4, 5
Exercise page 33 Question 1, 4, 5

Homework: Complete the class work at home.

Level 5 Term 2 Week 3 Day 5	**Lesson Plan**

Objective: To give the concept of world problem in fraction.

Activity: Written work

Material: Notebooks, pencils / pens.

Procedure: See page 33 of count down explanation is given over exercise C.

Class work: Exercise C

Warp up: Homework, Assessment (simplification)

Level 5 Term 2 Week 4 Day 1	Lesson Plan

Assessment: Topic Simplification

Level 5 Term 2 Week 4 Day 2	**Lesson Plan**

Objective: Students will be able to find the area of given shapes.

Activity: Finding area through pasting.

Material: Papers on which lines 1cmx1cm like are drawn. Simple charts, pencils, scales etc

Procedure:

Warm up:

- Make pairs in the class.
- Ask them to look in the class and observe which objects are rectangles, squares and triangles.

Activity 1:

- Ask each pair to take their scales and observe the cm on it.
- Give a square lined paper to each pair.
- Draw square lines on the board and draw a shape.
- Ask how many squares are there in this shape? Students will count and tell.

Explain: Each square is equal to $1cm^2$ so it has 7 squares; it means it covers a place of $7cm^2$ and $7cm^2$ is called area of this figure.

Task 1 class work: Exercise B page 34 on the pages.

Task 2:

- Teacher draw a rectangle like and ask:-

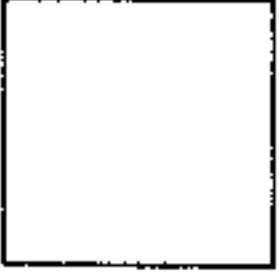
    - What is the area of rectangle?
    - There is another way of finding area.

- Ask:-
    - What is the length of this rectangle? (4cm)
    - What is the breath of this rectangle? (2cm)
        - area= length x breath
        - 4 x 2 = 8cm²
        - = 4+2+4+2 = 12cm Perimeter
        - = 2 (4+2)

(Explain / review perimeter)

Class work: Exercise page 34

Homework: Exercise A, D page 34

Level 5 Term 2 Week 4 Day 3	**Lesson Plan**

Objective: To teach area of composite shapes

Activities: Drawing + written work

Material: Pages with square lines, chart papers, pencils.

Procedure:

Warm up Q/A:

- What is the area of ▭ , ☐ these shapes?
- What is the perimeter of these shapes?

Activity 1:

- Make pairs
- Give a page to each pair
- Ask pairs to draw the shapes of exercise A page 35 on the papers by counting the squares according to the measurements.
- Now pairs count squares to find and write the area
- Paste these activities in the class.

Explanation: See the explanation given on the page 35 of count down book 5 to explain.

Class work: Exercise A page 35

Homework: Exercise B page 35

Level 5 Term 2 Week 4 Day 4	Lesson Plan

Objective: To give the concept of area of a triangle.

Activity: Written work in books.

Material: Books, pencils, pages or material shown on page 36 of countdown 5

Procedure: Follow the all procedure given on page 36 in countdown 5.

Class work: Exercise A page 36.

Level 5 Term 2 Week 4 Day 5	**Lesson Plan**

Objective: To give the concept of area of composite shapes.

Activity: Solution

Material: Books, Pencils, charts on which shapes and squares of explanation of page 37 are drawn.

Procedure:

Warm up: Ask some questions about yesterday work like,

Area of rectangle =?

Area of triangle =?

Explanation: See all the procedure of explanation given on page 37 of book count down 5 make charts of given figures and use these charts for explanation.

Class work: Exercise A, B page 37

Wrap up: Homework, Assessment topic area.

Level 5 Term 2 Week 5 Day 1	Lesson Plan

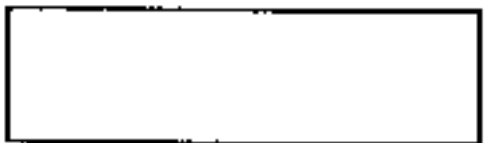
Assessment: Topic area.

Level 5
Term 2 **Lesson Plan**
Week 5
Day 2

Objective: Students will be able to find the area of parallelogram and triangles.

Activity: Pasting + written work

Material: Books, square lined pages, pencils, simple pages, glue stick.

Procedure:

Warm up:

- Draw a rectangle of and ask,
  - Find the area of this rectangle
  - Find its perimeter

Activity:

- Teacher draw a parallelogram
- Ask students to draw a parallelogram on the square lined pages.
- Cut and separate the parallelogram from the page.
- Ask students to cut the parallelogram from one side and place it other side
- and paste it on a page this shape will be a rectangle like this now.
- Ask students to find the area of this shape.
- Its area will be equal to the area of a parallelogram.

Explain: We can do it through another way = (length x breath)
= (3 x 6)
= 18 cm^2

Area some more examples like this

Class work: Exercise B page 38

Homework: Exercise A page 38

Level 5 Term 2 Week 5 Day 3	**Lesson Plan**

Objective: Students will be able to find the area of triangle.

Activity: Drawing, written work

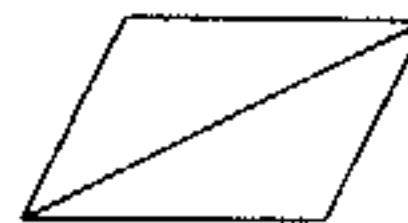
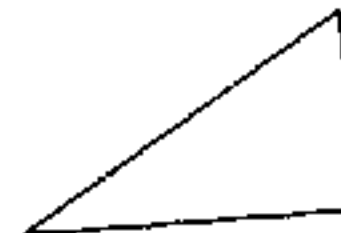
Material: Cut out of triangle, books pencils.

Procedure:

Warm up:

- How do we find the area of a rectangle?
- How do we find the area of a parallelogram?

Activity 1: Show a cutout of parallelogram of to the class and ask,

- What is this?
- What is its length?
- What is its breath?
- So what will be the area of this parallelogram? (3 x 6) = 18 cm^2
- Teacher folds it to show the half.

- What should be the area now?

Explain: Triangle is a half of rectangle so its area will be (6 x 3) ÷ 2
= 18÷2
= 9cm^2

Explain some more examples like this.

Class work: page 38 exercise C.

Homework: Practice area of parallelogram and are of a triangle.

Level 5 Term 2 Week 5 Day 4	**Lesson Plan**

Objective: To teach more about triangles.

Activity: Finding area.

Material: Books, pencils and material mentioned on page 39 and book 5.

Procedure:

Warm up: For warm up ask what is the area of a rectangle = (length x breath)
What is the area of a triangle? (length x breath) ÷ 2

Explanation: See the procedure of explanation on page 39 (count down 5)

Class work: page 39 exercise A page 40, question A, B and C
Page 42 question B on the book

Level 5 Term 2 Week 5 Day 5	Lesson Plan

Objective: Students will be able to find the volume

- By using cubes
- By using formula.

Activity: Finding volume

Material: Cubes / pencils / books.

Procedure:

Warm up:

- What is volume?
- How do you find volume of a solid shape?
- What is the formula for finding volume of a solid shape?

Explanation:

- Use wooden cubes to build a solid shape in front of students (see 1 shape page 40 from book)
- Ask them to count the unit cubes.
- Similarly explain shapes 2, 3 of page 40.
  For further explanation see page 40, 42.
  Home work; assessment topic area

Level 5 Term 2 Week 6 Day 1	Lesson Plan

Assessment

Level 5 Term 2 Week 6 Day 2	**Lesson Plan**

Objective: Students will be able to write the volume of each solid shape.

Activity: Finding volume.

Material: Wooden cubes, chart paper, pencil book

Procedure: See page 41 of book for explaining activity. (Also see level 4, term 4, week 4, 5 for explanation)

- Activity in group
- Display these activities in the class.

Level 5 **Term 2** **Week 6** **Day 3**	**Lesson Plan**

Objective: Students will be able to find the volume of solid shapes.

Material: Cubes / pencils / worksheet

Activity: Finding length, breath, height of solid shape, finding volume of solid shape.

Procedure: Follow the same procedure of day 1, week 5, term 4, level 4 for explanation.

Class work: Page 43 all exercise.

Level 5 Term 2 Week 6 Day 4	Lesson Plan

Objective: Students will be able to find the volume of solid shapes.

Material: Cubes / pencils / worksheet

Activity: Finding length, breath, height of solid shape, finding volume of solid shape.

Procedure: Follow the same procedure of day 1, week 5, term 4, and level 4 for explanation.

Class work: Page 44 exercise A

Homework: Class work is home work

Level 5 Term 2 Week 6 Day 5	Lesson Plan

Objective: Students will be able to find length, breath or height of any solid shape when volume is given.

Activity: Finding length, height or breath.

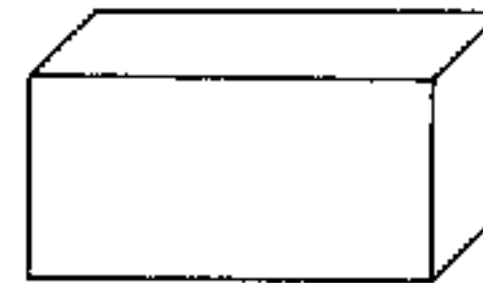
Material: Pencils / notebooks

Procedure:

Warm up: 5+3 = 9, 5-3 = 3, 5+ __ = 9, __ -3 = 3

- What is volume?
- What is the formula of finding volume?

Explanation:

- If cuboids has following dimensions. How can we find the volume?

- Call a student to find the volume.

Ask:

- What will be happened if we are given only breath = 6cm and length = 9cm and volume = 216 and we have to find height.

- Let students try to find their selves, explain nothing and give them 5 minutes for finding this.

Explain:

- We can find the missing measurement by using division like

Volume = 216 cm^3
L x b = 9 x 6 = 54
Height = volume ÷ (l x b)

$= 216 \div 54$
$= 4cm$

- If l, b, h volume then same will be done with it. Volume = 216 cm^3
  $h \times b = 4 \times 6 = 24$

Length = volume $\div$ (h x b)
$= 216 \div 24$
$= 9cm$

Explain finding the breadth in the same way.

Class work: Exercise B question 1, 2
Exercise C question 1, 2, 3 page 44

Wrap up:
Homework: Exercise B question 3
Exercise question 4, 5 page 44.

Level 5 Term 2 Week 7 Day 1	Lesson Plan

Objective: Students will be able to have a concept of capacity along with volume.

Activity: Finding capacity.

Material: A beaker which can hold 1 liter, books, pencils.

Procedure:

Warm up:

- What is volume?
- Do you know what capacity is?

Explain: The number of things or space that a container can hold is called capacity.

Activity: Liking volume with capacity. See explanation on page 45 (countdown 5)

Class work: Exercise A page 45.

Level 5
Term 2
Week 7
Day 2

Lesson Plan

Objective: Students will be able to calculate reflex angle and can draw reflex angle.

Activity: Drawing reflex angles measuring reflex angles.

Material: Protractor, angle model, pencils.

Procedure: Follow the procedure of level 4, week 5, term 2 and day 2.

Class work: Exercise A question 1, 2
Exercise B question 1, 2 page 121

Warp up:
Homework: Exercise A question 3, 4
Exercise B question 3, 4 page 121

Level 5 Term 2 Week 7 Day 3	**Lesson Plan**

Objective: Students will be able to know the kinds of triangles with respect to sides.

Activity: Written work

Material: A chart with triangles of different kinds drawn on it.

Procedure:

Warm up: Draw a triangle on the board and ask:

- What is the name of this shape?
- How many sides it has?
- How many angles it has?
- Do you know how many kinds a triangle has?

Explanation: Paste the chart on the board and explain the different types of triangles. See page 122 of countdown 5 for explanation.

Class work: Exercise A, B page 122 (remaining class work will be the homework)

Level 5 Term 2 Week 7 Day 4	**Lesson Plan**

Objective: Students will be able to know the kinds of triangles with respect to angles.

Activity: Grouping of triangles according to their angles.

Material: Pencils, charts of triangles, books.

Procedure:

Warm up:

- What is a triangle?
- How many types a triangle has?
- Which thing helps you to know the types of triangle?
- What are the types of angles?

Explanation: Paste the chart of triangles grouped according to the types of angles and explains the types of triangles according to the types of angles. (See page 123 for explanation)

Class work: Page 123 exercise A, B
(Remaining work will be homework)

Level 5 Term 2 Week 7 Day 5	Lesson Plan

Objective: To practice the types of triangle by measuring the angles.

Activity: Written work

Material: Books, set squares, pencils.

Procedure:

Warm up: Follow the previous day's procedure.

Class work: Page 124 Exercise A